CITY OF GOODYEAR---2002 NEC AMENDMENTS

EFFECTIVE JULY 1, 2004

F. Effective July 1, 2004, there is herewith adopted, in total, by reference thereto The National Electrical Code, 2002 Edition, as published by the National Fire Protection Association and adopted as a public record by Resolution No. 04-911 of the Mayor and Council of the City of Goodyear, as fully and completely as if set forth in full herein, except as may be hereafter or otherwise amended by this chapter and except as modified or changed as follows:

(1) Article 80, Introduction, is hereby deleted in its entirety.

(2) Chapter 2, Wiring and Protection, is hereby amended to read as follows:

210-8. Ground-Fault Circuit-Interrupter Protection for Personnel, is hereby amended as follows:

FPN: See 215-9 for ground-fault circuit-interrupter protection for personnel on feeders.

(No changes to Article with the exception of the following revisions):

(A) Dwelling Units. All 125-volt, single-phase, 15- and 20-ampere receptacles installed in the locations specified in (1) through (8) shall have ground-fault circuit-interrupter protection for personnel.

(7) Convenience receptacles located within 1.8 m (6 ft) of any sink, wash basin, tub, or shower.

(B) Other than Dwelling Units. All 125-volt, single-phase, 15- and 20-ampere receptacles installed in the locations specified in (1) through (5) shall have ground-fault circuit-interrupter protection for personnel.

(4) Convenience receptacles located within 1.8 m (6 ft) of any sink, wash basin, tub, or shower.

(5) Outdoors.

Add new Article 230-63 to read as follows:

230-63. Location. All service equipment rated 1000 amperes or more located inside a building shall be enclosed within a room or space separated from the rest of the building by not less than one-hour fire-resistive occupancy separation or fire barrier installed in compliance with the Building Code.

250.118. Types of Equipment Grounding Conductors, shall be amended to read as follows:

The equipment grounding conductor run with or enclosing the circuit conductors shall be one or more or a combination of the following:

1. A copper, aluminum, or copper-clad aluminum conductor. This conductor shall be solid or stranded; insulated, covered, or bare; and in the form of a wire or a busbar of any shape.
2. Threaded rigid metal conduit and fittings.
3. Threaded intermediate metal conduit and fittings.
4. Armor of Type AC cable as provided in Section 333-21.
5. The copper sheath of mineral-insulated, metal-sheathed cable.
6. The metallic sheath or the combined metallic sheath and grounding conductors of Type MC cable with an individual equipment grounding conductor.
7. Cable trays as permitted in Sections 318-3(c) and 318-7.
8. Cablebus framework as permitted in Section 365-2(a).
9. Other electrically continuous metal raceways listed for grounding.

(3) Chapter 3, Wiring Methods and Materials, is hereby amended as follows:

310-15(b)(6), is hereby amended to read as follows:

(6) 0120/240-Volt and 120/208-Volt, 3-Wire, Single-Phase Dwelling Services and Feeders. For dwelling units, conductors, as listed in Table 310-15(b)(6), shall be permitted as 120/240-volt and 120/208 volt, 3-wire, single-phase service-entrance conductors, service lateral conductors, and feeder conductors that serve as the main power feeder to a dwelling unit and are installed in raceway or cable with or without an equipment grounding conductor. For application of this section, the main power feeder shall be the feeder(s) between the main disconnect and the lighting and appliance branch-circuit panelboard(s), and the feeder conductors to a dwelling unit shall not be required to be larger than their service-entrance conductors. The grounded conductor shall be permitted to be smaller than the ungrounded conductors, provided the requirements of Sections 215-2, 220-22, and 230-42 are met.

Table 310-15(b)(6). Conductor Types and Sizes for 120/240-Volt and 120/208-Volt, 3-Wire, Single-Phase-Dwelling Services and Feeders.
Conductor Types RH, RHH, RHW, RHW-2, THHN, THHW, THW, THW-2, THWN, THWN-2, XHHW, XHHW-2, SE, USE, USE-2

Conductor (AWG or kcmil)

Copper	Aluminum or Copper-Clad Aluminum	Service or Feeder Rating (Amperes) ≤ 30°C (86°F)	> 30°C (86°F)
4	2	100	-----
3	1	110	-----
2	1/0	125	100
1	2/0	150	125
1/0	3/0	175	150
2/0	4/0	200	175
3/0	250	225	200
4/0	300	250	225
250	350	300	250
350	500	350	300
400	600	400	350
500	750	----	400

FPN: For single-phase panels feed from a 3-phase system, the grounded conductor cannot be reduced in size for a 120/208-volt system, see 220.22

334.10, Uses Permitted, is hereby modified as follows:

334.10 Uses Permitted. Type NM, Type NMC, and Type NMS cables shall be permitted to be used in the following:

1. One- and two-family dwellings, multifamily dwellings, and other residential accessory structures
2. Multifamily dwellings permitted to be Types III, IV, And V construction except as prohibited in 334.

(Items 3 and 4 and A, B, and C to remain the same.)
334.12, Uses Not Permitted, shall be modified as follows:

334.12. Uses Not Permitted.
(A) Types NM, NMC, and NMS. Types NM, NMC, and NMS cables shall not be used as follows:

(All items except 1 and 10 to be deleted.)

(4) Chapter 5, Special Occupancies, is hereby amended as follows:

501.16 (B) Types of Equipment Grounding Conductors.
(Article remains the same, delete exception):

502.16 (B) Types of Equipment Grounding Conductors.
(Article remains the same, delete exception):

503.16 (B) Types of Equipment Grounding Conductors.
(Article remains the same, delete exception):